ABSTRACT OF THE DISCLOSURE

A method for manufacturing a radiographic image conversion panel having a photostimulable phosphor layer on a support. The method includes: setting a distance between a photostimulable phosphor basic material and a substrate 7 to 60 cm; controlling a temperature of the substrate; and evaporating the photostimulable phosphor basic material in a vacuum of 1.0×10^{-2} Pa with an evaporation speed of 0.5 μm/min or more, to form a photostimulable phosphor in the photostimulable phosphor layer by a vapor phase method. The evaporation speed is preferably in a range of 0.5 to 10 μm/min.